UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,520	12/07/2007	Martyn Pritchard	13425-200US1 BV-1093 US	6818
	7590 11/26/201 ARDSON P.C. (BO)		EXAMINER	
P.O. BOX 1022			MCINTOSH III, TRAVISS C	
MINNEAPOLIS, MN 55440-1022			ART UNIT	PAPER NUMBER
			1623	
			NOTIFICATION DATE	DELIVERY MODE
			11/26/2010	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

	Application No.	Applicant(s)			
Office Action Comments	10/598,520	PRITCHARD ET AL.			
Office Action Summary	Examiner	Art Unit			
	TRAVISS C. MCINTOSH III	1623			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)⊠ Responsive to communication(s) filed on <u>07 S</u>	Sentember 2010				
	s action is non-final.				
<del>'=</del>	/ <del></del>				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
<ul> <li>4)  Claim(s) 1-6 and 29-76 is/are pending in the application.</li> <li>4a) Of the above claim(s) 6,30-57 and 59-76 is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-5,29 and 58 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> </ul>					
8) Claim(s) are subject to restriction and/o	or election requirement.				
<ul> <li>9)  The specification is objected to by the Examiner.</li> <li>10)  The drawing(s) filed on <u>01 September 2006</u> is/are: a)  accepted or b)  objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ■ All b) ■ Some * c) ■ None of:  1. ■ Certified copies of the priority documents have been received.  2. ■ Certified copies of the priority documents have been received in Application No  3. ■ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 8/3/07.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ate			

#### DETAILED ACTION

#### Election/Restrictions

Applicant's election without traverse of Group I in the reply filed on 9/7/10 is acknowledged. Claims 6, 30-57 and 59-76 are withdrawn.

### Claim Objections

Claims 1-5, 29, and 58 are objected to because of the following informalities: the claims contain withdrawn subject matter pursuant to the restriction requirement mailed on 8/5/10 and the election filed 9/7/10. Appropriate correction is required.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-5 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3-5 and 29 attempt to limit the compound of claim 1 by stating the structure is defined in "any of Examples 1-6" of the specification, or is one of various compound numbers of the specification. It is noted that the second paragraph of 35 USC 112 requires that the claims particularly point out the subject matter that applicant regards as the invention and claims referring to the specification are improper except in rare instances. See Ex parte Fressola, 27 USPQ 2d 1608, US Patent and Trademark Bd. Pat. App. and Int. 1993.

Application/Control Number: 10/598,520 Page 3

Art Unit: 1623

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Marumoto et al. ("Synthesis and Coronary Vasodilating Activity of 2-substituted Adenosines", Chem. Phamr. Bull., 23(4) 759-774, 1975).

Marumoto discloses compounds anticipating those instantly elected wherein the compounds comprise the instant variables claims: X=OH; R<sub>2</sub>=NH<sub>2</sub>; R<sub>5</sub>=CH<sub>2</sub>OH; R<sub>6</sub>=H; and, R<sub>1</sub> is C5-alkoxy (see compound 5d), or R<sub>1</sub> is -OCH<sub>2</sub>CH<sub>2</sub>OH (see compound 5l), or R<sub>1</sub> is phenoxy (see compound 5o), or R<sub>1</sub> is substituted phenoxy (see compound 5p or 5q which are substituted with methyl or methoxy in the 3- or 4-positions respectively). The compounds are also used in compositions (see coronary dilator potency). As such, since a species anticipates a genus, and various species are exemplified in the document, claims 1 and 58 are seen to be anticipated.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5, 29, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marumoto as applied to claims 1 and 58 above.

The claims of the instant application are drawn to various compounds and compositions comprising the same.

Marumoto disclose compounds and compositions overlapping in scope with the instantly claimed compounds, as set forth supra. What is not exemplified is the compounds of claims 2-4 and 29 of the instant application.

However, many of the compounds listed in claims 2-5 and 29 are obvious variants of the species set forth in Marumoto. For example, R<sub>1</sub> is limited to phenoxy substituted with 4-methyl

Art Unit: 1623

or 2-methyl. Both are seen to be positional isomers of compound 5p of Marumoto which comprises phenoxy substituted with methyl in the 3-position (m-CH<sub>3</sub>C<sub>6</sub>H<sub>4</sub>-). Compounds which differ only in the placement of substituents in a ring system are not patentable absent unexpected results. See In re Jones, 162 F.2d 638, 74 USPQ 152 (CCPA 1947). As such, these positional isomers are seen to be obvious over the compounds of the prior art.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRAVISS C. MCINTOSH III whose telephone number is (571)272-0657. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/598,520 Page 6

Art Unit: 1623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Traviss C McIntosh III/ Primary Examiner, Art Unit 1623 November 21, 2010